DOCUMENT RESUME

ED 348 360 SP 033 999

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TITLE Impact of Effective Teaching Research on Student Achievement and Teacher Performance: Equity and Access Implications for Quality Education.
PUB DATE 92
NOTE 17p.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; *Access to Education; *Cultural Differences; Educational Assessment; Educational Needs; Educational Quality; *Effective Schools Research; Elementary Secondary Education; *Equal Education; Excellence in Education; Literature Reviews; *Minority Groups; Outcomes of Education; School Effectiveness; Teacher Effectiveness

ABSTRACT

This paper examines effective teaching research and its influence on school practices, student achievement, the teaching process, teacher education, and those conditions of teaching which enhance equity and access to a quality education for all students, specifically those who are culturally diverse. This document presents a brief historical perspective with a summary of major conclusions from effective teaching research: the impact of effective research on student achievement; a critique of effective teaching; and implications of effective teaching research for achieving equity and access to quality education. Findings from the research indicate that student achievement is linked to teacher competence, lesson presentation, review, skill practice, teacher questioning techniques, discipline, and effective patterns of instruction; that schools need to focus on the worth and dignity of each individual and strive for unity of all peoples; that knowledge must be seen as the basis of dignity for all persons; that respect for each other's opinions must be taught; and that teachers must believe in the ability of all students to learn if appropriately, patiently, and respectfully taught. (LL)

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ED348360

Impact of Effective Teaching Research on Student Achievement and Teacher Performance: Equity and Access Implications for Quality Education

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Impact of Effective Teaching Research on Student Achievement and Teacher Performance: Equity and Access Implications for Quality Education

The research on effective teaching has dramatically influenced school practices, student achievement, the teaching process, and teacher education. The major focus of the effective research has centered on applying theory into practice with a distinct focus on the relationship between teacher behavior and student achievement (Good, 1990). One major assumption which predicates the effective teaching research is that student achievement, at all levels of education, can be measured with validity and reliability in academic and social areas. This inquiry explores several unifying themes of this assumption which characterizes some of the major impacts of the research on effective teaching.

The analysis of these themes is directed toward an understanding of educational practice, student achievement, and their relationships to teacher performance and teacher education. A brief historical perspective with a summary of major conclusions from effective teaching research is presented first. In the next three sections, the impact of effecting research on student achievement, effective teaching, is critiqued. The final section explores implications of the effective teaching research for achieving equity and access to quality education.

Historical Perspective

The effective teaching research developed gradually during the twentieth century within the parameters of the scientific movement in education (Clifford, 1973). One major focus underlying the effective teaching research was a demand upon the schools for accountability. Another force was the belief that research would improve schools. For example, the Cooperative Research Act was passed by the United States Congress in 1954. The major purpose of this legislation was to improve education at every level and in every subject area through educational research, development, demonstration, and dissemination activities (Clifford, 1973). The decade of the 1970's exemplified the widespread dissatisfaction with American schools. The nation turned to scientific research as a means for redirecting the schools to ensure equity and access of educational opportunities for all students. Advancements centered on standardized testing, improving schools and curriculum, improving teachers' skills, reforming teacher education, and creating effective schools.

Recent advancements in the research on effective teaching depart considerably from traditional research on teaching (Clifford, 1973). Now for example, the effective teaching research places a distinct emphasis on studying real classroom processes as these effect student achievement (Porter and Brophy, 1988). A major concern has focused on the conditions of teaching which enhance equity and access

to quality educational opportunities for all students (Goodlad & Bailey, 1990). Consequently, essential factors associated with quality of teachers' professional competence and quality professional teacher education programs have shaped the research agenda on effective teaching.

Student Achievement

The major research finding is that student achievement is related to teacher competence in teaching (Anderson, Evertson, & Brophy, 1979; Emmer, Evertson, & Brophy, 1980; Rosenshine & Stevens, 1987). The evidence showed a direct relationship between the manner in which lessons are taught and student achievement. Students achieve more when systematic teaching procedures are employed. This type of teaching includes presenting content to students in small steps with practice after each step. Also students receive guidance during initial practice, followed with a high level of successful practice.

Students show greater academic progress when lessons begin with a short review of previous learning. This insures the students' understanding of prerequisite learning. Most students are successful when lessons begin with a short statement of goals and new material is presented in small steps. There should be student practice after each step. The effective teaching research suggest that students need to be given clear, detailed instruction and explanations with high levels of active practice. Students progress when teachers ask a large number of

questions, check for their understanding, and obtain responses from all students. In addition, greater achievement is evident when student receive explicit instruction as well as systematic feedback about their performance (Rosenshine, 1986).

There are limits to the amount of information learners can attend to and process effectively. Too much information causes learners to become confused and lose interest in learning (Tobias, 1982). Students need teachers to adjust the amount of information and the pace of instruction to fit their ability to process information.

Students need to process new material in order to transfer it from working memory to their long term memory. This means that students need to rehearse, summarize, or enhance the new knowledge (Gagne, 1985). They require many opportunities to summarize ideas to make the connections between the old and the new content. This process is determined to a considerable degree on students' preferred learning styles, capabilities, and interests.

New learning is easier for students when prior learning is readily accessible. This means that all students need many opportunities to apply and use their knowledge and skills in different learning situations. Moreover, they must acquire a high level of retention and application of previously learned skills. This process is achieved through overlearning. Overlearning takes place when practice is afforded beyond the point where the student has to work to

give the correct response. Only when prior learning is readily accessible are students able to use knowledge for higher levels of critical and creative thinking (LaBerge & Samuels, 1974).

These findings from the effective teaching research support the premise that, provided with the appropriate instruction, all students can achieve the required academic goals. Students seem to progress best in structured curricula. Their achievement is related to factors which teachers and schools have the power to control.

Characteristics of Effective Teacher Behavior

A great deal of the effective teaching research has been directed toward enabling teachers to assess and improve their teaching effectiveness. Research findings that distinguish characteristics of effective teaching form the basis of this continuing effort. Medley (1977) reviewed more than 280 studies of behavior differences between effective and ineffective teachers. He reported that most effective teachers run more orderly classrooms. While effective teachers, classrooms may not always be quiet, activity among students reflects "task-related excitement" more than student misbehavior. Most student achievement gains occurred in classrooms where the climate is neither critical nor overly lavish in praise. Students are afforded opportunities satisfy important social, emotional, and psychological needs without detracting from their academic performance.

Emmer, Evertson and Anderson (1980) studied how effective teachers organize and manage their classes from the first days of schools and maintain their management of effectiveness throughout the year. They reported that classrooms of the more effective teachers were characterized by high levels of student cooperation, success and task-involvement. Effective teachers attempt to promote student ownership of rules by encouraging classroom discussions of the reasons for establishing rules. Rationale for the rules and examples of specific student behaviors which fall under the rules are provided. Students in these classes made good achievement gains during the year. More effective teachers were distinguished by how clearly they articulated and integrated their rules and procedures into a workable system (Emmer, Evertson & Anderson, 1980). These teachers effectively taught rules and procedures to their students. This places the teacher in control as the leader and provides an immediate basis for establishing expectations for student behavior.

Kounin (1970) found that effective classroom management occurred when teachers maintained high levels of student work involvement. Greater student involvement helped to minimized student misbehavior. Effective teachers demonstrated knowledgeability of children's behavior in the classroom. Moreover, these teachers attended to more than one issue simultaneously. They managed activity movement and maintained a group focus. Students were provided with

programmed learning with variety and intellectual challenge. In a generic perspective effective teachers are able to orchestrate a very large number of effective patterns of instruction (Brophy, 1979). They synthesized diagnostic, instructional, managerial, and therapeutic skills to fit the context and students' needs. The learning process was highly interactive centered on genuine teacher and student involvement in accomplishing specific academic goals and objectives.

Research on effective teaching has helped to identify patterns of instruction that are clearly more effective in producing student achievement gains (Peterson, Marx, & Clark, 1978). Also, while patterns of instruction are related to achievement gains they also produce healthier attitudes among students toward school and self (Medley, 1977). Effective teachers exhibit characteristics of direct or interactive teaching. The teacher actively teach students and engage them in academic interactions. They do more than merely serve as resource persons or facilitators for students who primarily acquire learning on their own through workbooks and programmed materials (Rosenshine, 1979; Good, 1979). There is a clear focus on academic goals, promoting extensive content coverage and high levels of students engagement in learning.

More effective teachers assess students' understanding and progress. They through follow-up with recitations or practice in which students have an opportunity to

demonstrate their acquisition of knowledge or skill. Students are moved briskly from step to step. By keeping the steps small and easily attainable students show higher achievements (Brophy, 1977). These teachers adjust the difficulty level of the materials to fit the students ability. They give students a high level of successful learning experiences. This allows students to master the material quickly which gives them a sense of personal success and accomplishment (Brophy and Evertson, 1976).

More effective teachers use ordered or patterned turn taking procedures for selecting students. This promotes better learning than random taking turns (Brophy and Evertson 1976). Effective teachers pose lower-level questions which students can answer successfully 75 percent of the time, as opposed to higher-level cognitive questions (Rosenshine, 1979).

Equity and Access to Quality Education

There are a few fundamental moral commitments that have always influenced the cultural and social realities in our society. Over forty years ago, Counts (1945) in his Kappa Delta Pi Lecture, "Education and the Promise of America" summarized five of these moral commitments. The first proclaims the supreme worth and dignity of the individual. It celebrates the importance of the free development of each individual to the fullest potential. It acknowledges the essential unity of all people and all races.

The second moral commitment insists that each person is a rational being and has the power of choice.

The third moral commitment acknowledges the value of the scientific method as a basis of inquiry into every sphere of interest. It claims that knowledge leads to better control and greater freedom in all areas of living.

The fourth speaks of democratic values and the worth and dignity of all persons. It recognizes each individual's intelligent judgment. Moreover, it assures equality of treatment and the belief that common people will share in the good things of the nation.

Finally, the fifth moral commitment is a plea for world peace. It declares that war and violence are hostile to democracy. Most importantly, is the acclamation that peace is possible for all human everywhere.

Counts (1945) emphasizes that we have a moral commitment not to a few select students - but to all students in the schools. Teachers may have a tendency to overlook the student who does not "fit in" to the concept of the "good" student.

In Access to Knowledge: An Agenda for Our nation's Schools, Goodlad & Keating (1990) acknowledged that there is currently a challenge to school systems to respond effectively to the increasingly cultural diverse student population. The prevailing practice of blaming students when learning does not occur is counter productive. Moreover, the pervasive practice of devising programs to

"fix" them; to have students conform with some model profile of achievement appears to have largely ignored the richness of students' cultural diversity.

The new agenda, according to Goodlad & Keating (1990), supports the need for schools to respond to a the wide range of students who learn in different ways, speak different languages, and bring different cultures into the classrooms. There are conditions outside of the classroom that effect students' behavior and performance. These conditions immensely influence teachers' judgements for teaching. The major question, according to Bailey (1990) is should schools create educational environments the nurture the realities of students' diversity without losing sight of academic goals? Another consideration too is how do schools institutionalize these reforms that are mutually reinforcing to teachers' professionalism and to other components of school systems.

The focus of the effective teaching research has addressed the conditions for affecting student achievement. Anderson, Anderson, and Prawat, 1985). This research tradition acknowledges that all persons can learn if taught appropriately. Several seminal conclusions from the effecting teaching research support this major premise (Squires, Huitt & Segars, 1984; Rosenshine & Stevens, 1987). Students' involvement in class and success on daily assignments and tests is related to higher achievement of standardized tests. When teachers teach most of the content covered by standardized tests, students are more likely to

have higher achievement scores. In addition, the research findings show that teacher competence in teaching, as opposed to curriculum packages result in higher achievement scores.

A very promising finding for improving equity and access to quality education asserts that all students, including those from low socioeconomic backgrounds, are capable of exceptional achievement. This finding is related to the evidence that principals, irrespective to the school setting, exerts a tremendous influence toward refining and maintaining a schools' social system that promotes achievement and discipline. Finally, these conclusions illustrate that teachers and schools make a significant difference in students' achievement.

Summary

Examining the processes effecting student achievement through observations in the real classrooms, researchers have focused on the conditions of teaching which enhance equity and access to a quality education for all students, even those who are culturally diverse. Findings from the effective teaching research suggest that student achievement is linked to teacher competence, lesson presentation and review, skill practice, teacher questioning techniques, and discipline. This research has helped to identify patterns of instructions which are clearly more effective in producing student achievement gains.

The moral commitments that effect our society according to Counts (1945) are the same moral commitments that effect our schools. Schools must see the worth and dignity of each individual. They must strive for the unity of all peoples. Knowledge must be seen as the basis of dignity of all persons. Respect for each other's opinions must be taught as the basis of world peace.

Presently, in our school systems, there is a need to respond more effectively to culturally diverse students. Instead of trying to "fix" them, schools - if they are to become more effective - must realize that all students can learn if taught appropriately, patiently, and respectfully. It is only then, that all students will be afforded equity and access to quality education.

References

Anderson, A.C.H., Anderson, L.M., & Prawat, R. (1985). Socialization into student role: Teacher and student influences. (Research Series N. 1060). East Lansing, Michigan State University, Institute for Research on Teaching.

Anderson, L.M., Evertson, C.M., & Brophy, J.E. (1979). An experimental study of effective teaching in first grade reading groups. The Elementary School Journal, 79, 193-222.

Anderson, L.M., Evertson, C.M., & Emmer, E.L. (1979, (April). Dimensions in classroom management derived from recent research. In S. Dasho (Chair), Perspectives on Classroom Management Research. Symposium presented at the annual meeting of the American Educational Research Association, San Francisco. (ERIC No. ED 175 860).

Bailey, A.Y. (1990). Introduction. In John I. Goodlad and Pamela Keating (Eds.). Access to knowledge: An Agenda for our nation's schools (pp.vii-xiii) New York: College Entrance Examination Board.

Brophy, J., (1979). Teacher behavior and its affects. Journal of Educational Psychology. 21, 733-750).

Brophy, J. & Evertson, C., (1976). Learning from teaching: A developmental perspective. Boston: Allyn & Bacon.

Clark, C., Gage, N., Marx, R., Peterson, P., Stayrook, N., & Winne, P. (1979). A factorial experiment on teacher structuring, soliciting and reacting. Journal of Educational Psychology, 71, 534-552.

Clifford, G.J. (1973). A history of the impact of research on teaching. In R. Travers (Ed.) Second Handbook of Research on Teaching (pp. 1 - 46). Chicago: Ran McNally College Publishing Company.

Counts. G.S., (1945). Education and the promise of America. New York: C. Publishing Company, Inc.

Emmer, E.T., Evertson, C.M., & Anderson, L.M., (1980). Effective classroom management at the beginning of the school year. The Elementary School Journal. 80(5),

Gagne, E.D. (1985). The Cognitive Psychology of School Learning. Boston: Little Brown and Co.

Good, T. (1990). Building the knowledge base of teaching. In D. Dill & Associates, What Teachers Need to Know: The Knowledge, Skills, and Values Essential to Good Teaching (pp. 17-75). California: Jossey-Bass Inc., Publishers.

Good, T., (1979). Classroom expectations: Teacher-pupil interactions. In J. McMillan (Ed.), The Social Psychology of School Learning. New York: Academic Press.

Goodlad, J.I. & Keating, P., (Eds.). (1990). Access to knowledge: An agenda for our nation's schools. New York: College Entrance Examination Board.

LaBerge, D., & Samuels, S.J. (1974). Toward a theory of automatic information processing in reading. Cognitive Psychology, 6, 293-323.

Kounin, J., (1970). Discipline and group management in classrooms. New York: Holt, Rinehart and Winston.

Medley, D.,(1977). Teacher competence and teacher effectiveness: A review of process product research. Washington, D.C: American Association of Colleges for Teacher Education.

Medley, D., (1979). The effectiveness of teachers. In P. Peterson and H. Walberg (Eds.), Research on Teaching: Concepts, Findings, and Implications (pp. 11-27). California: McCutchan.

Peterson, P.L., Marx, R.W., and Clark, C.M. (1978). Teacher planning, teacher behavior, and students' achievement. American Educational Research Journal, 15, 417-432.

Porter, A.C., & Brophy, J. (1988). Synthesis of research on good teaching: Insights from the work of the institute for research and teaching. Educational Leadership, 46,74-85.

Rosenshine, B., (1979). Content, time and direct instruction. In P. Peterson and H. Walberg (Eds.), Research on Teaching: Concepts, Findings and Implications (pp. 28-69). California: McCutchan.

Rosenshine, B.V., (1986, April). Synthesis of research on explicit teaching. Educational Leadership, 43, 60-69.

Rosenshine, B.V., (1987). Teaching functions. In Merlin C. Wittrock (Ed.), Third Handbook of the Research on Teaching (pp. 376-391). New York: Macmillan.

Squires, D.A., Huitt, W.G., & Segars, J.K., (1974). Effective schools and classrooms: A research-based perspective. Alexandria, Virginia: Association for Supervision and Curriculum Development.

Tobias, S. (1982). When do instructional methods make a difference? Educational Researcher, 11, 4-10.